AMENDMENT

IN THE SPECIFICATION:

Please amend paragraph 17 as follows:

Refrigerant is compressed in a compressor 22 to a high pressure and a high enthalpy. The compressed refrigerant then flows through a condenser 24 and is cooled. The high pressure and low enthalpy refrigerant is then expanded to a low pressure in an expansion device 26. The expansion device 26 can be an electronic expansion valve, or any other type of expansion device. After expansion, the refrigerant flows through an evaporator 28 and accepts heat from the air in the refrigerated compartment 30. A An evaporator fan 32 blows a fluid over the evaporator 28, and the fluid rejects heat to the refrigerant in the evaporator 28, heating the refrigerant and cooling the fluid in the refrigerated compartment 30. In one example, the fluid is air. The refrigeration system 20 can also include more than one evaporator 28 and 44 (i.e., master-slave). If more than one evaporator 28 is employed, the evaporators 28 can operate independently and at different times. That is, one evaporator 28 can be operating when the other evaporator 28 44 is not operating. The refrigerant then returns to the compressor 22, completing the cycle.

Please amend paragraph 18 as follows:

The evaporator fan 32 circulates the fluid in the refrigerated compartment 30 separately from the refrigeration system 20. Therefore, the evaporator fan 32 can operate when the refrigeration system 20 is not operating. The fluid can also circulate by natural convection.

Please amend paragraph 19 as follows:

In one example, the cooler refrigerated compartment 30 includes a door 34 that allows access to the refrigerated compartment 30. When food is to be added to or removed from the refrigerated compartment 30, the door 34 is opened to allow access to the refrigerated compartment 30. However, it is possible that the refrigerated compartment 30 does not include a door 34, such as if the refrigerated compartment 30 is a display case.

Please amend paragraph 20 as follows:

The refrigeration system 20 includes an electronic refrigeration controller 42 having a timed circuit feature. The electronic refrigeration controller 42 controls various aspects of the refrigerated compartment 30, including the temperature. A push button 36 is located either near the evaporator 28 or near the entrance to the refrigerated compartment 30. Although one push button 36 is illustrated and described, it is to be understood that more than one push button 36 and 46 can be employed. Preferably, the push button 36 is incorporated into an existing Guardian electronic refrigeration control by Parker-Hannifinn.

Please amend paragraph 24 as follows:

After the predetermined amount of time, the sleep-mode ends and the refrigerated compartment 30 is again cooled, ensuring that the refrigerated compartment 30 does not elevateelevated above a critical temperature. The controller 42 sends a signal to open the solenoid valve 40 and the expansion valve 26, starting the refrigeration system 20. The controller 42 energizes and opens the solenoid valve 40, allowing refrigerant to enter the compressor 22. Because the refrigeration was pumped out of the low side of the refrigeration system 20 when the solenoid valve 40 and the expansion valve 26 were closed, the refrigerant does not flood the compressor 2022. The controller 42 also activates the evaporator fan 32 to again blowing cool air over the evaporator 28 and into the refrigerated compartment 30.

Please amend paragraph 27 as follows:

Figure 2 schematically illustrates the effect of improperly shutting down and starting up the refrigeration system 20 with regard to the average kilowatt demand of the equipment as a function of time over a four-hour time frame. The duration of time between each point is 15 minutes. At point 1, the refrigeration system 20 is improperly shut down. At this time, approximately 3.80 kilowatts is drawn. At point 10, the refrigeration system 20 is turned back on. At point 11, there is a high kilowatt draw because the compressor 22 must pull down the large refrigeration load entering the compressor 22. The average kilowatt draw does not return to the beginning average of 3.80 kilowatts until point 18. That is, the kilowatt draw does not return to the beginning average of 3.80 kilowatts until 1.75 hours after the compressor 22 turns back on. As show in Figure 3, during this time, the surface temperature of the items in the refrigerated compartment 30 increases. In the present invention, the refrigeration system 20 and the evaporator fan 28 32 are properly shut down, avoiding a large kilowatt average and preventing the surface temperature of the items in the refrigerated from increasing.

Please amend paragraph 28 as follows:

The sleep-mode can be interrupted by again pressing the push button 36. The solenoid valve 40 and the expansion valve 26 open to allow refrigerant to enter the compressor 22. The evaporator fan 32 of the evaporator 28 is also activated to blow cool air into the refrigerated compartment 30. By pressing the push button 36, the sleep-mode ends before the predetermined time.

Please amend paragraph 29 as follows:

A programming algorithm limits the number of times that the sleep-mode can be activated in a given time frame. If a person presses the push button 36 after the sleep-mode has ended to again start a sleep-mode, the sleep-mode will not begin again until a temperature sensor 38 detects that the cooler refrigerated compartment 30 has reached a predetermined temperature for a predetermined amount of time. When the temperature sensor 38 detects that the temperature in the refrigerated compartment 30 exceeds the predetermined temperature, the sleep-mode can again be initiated.

Please amend paragraph 30 as follows:

Alternately, the electronic refrigeration controller 42 can limit the duration of sequential sleep-modes to ensure that the refrigerated space 30 is not left without refrigeration for too long. The number of times that sleep-mode can be initiated in a given time frame can also be limited.